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Telephone Monitoring and Support For Veterans with Chronic Posttraumatic Stress Disorder: A Pilot Study

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ABSTRACT: Dropout from outpatient mental health treatment may contribute to high rates of relapse and rehospitalization among veterans with chronic posttraumatic stress disorder (PTSD). In a quasi-experimental cohort study, 87 male and 17 female veterans discharging from residential PTSD treatment received either standard referral to outpatient care ($N = 77$) or standard referrals supplemented by biweekly telephone calls ($N = 27$). Telephone monitoring and support was feasible and acceptable to 85% of clients. Compared to prior patient cohorts, clients receiving telephone support were twice as likely (88% vs. 43%) to complete an outpatient visit within 1 month of discharge and reported higher satisfaction with care.

KEY WORDS: posttraumatic stress disorder; veterans.

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Posttraumatic stress disorder (PTSD) is often a chronic disorder in the VA patient population. Over one quarter of veterans discharging from inpatient PTSD treatment are rehospitalized within 6 months (Fontana, Rosenheck, Spencer, & Gray, 2003). In one study of 400 veterans discharging from a residential PTSD treatment program, up to half the clients relapsed to aggressive behavior, substance use, or suicide attempts within 4 months of discharge (Hartl et al., 2005). Dropout from outpatient treatment may contribute to relapse and rehospitalization. Despite being eligible for free or low-cost care, veterans receiving VA treatment for PTSD spend 40% of their time "out of treatment"; i.e., having no treatment visits within the past 100 days (Ronis et al., 1996). Thirty percent of clients with a PTSD diagnosis who receive VA inpatient treatment do not complete a follow-up outpatient mental health visit within 1 month of discharge (Fontana et al., 2003).

Ongoing telephone monitoring has been used to enhance treatment compliance and prevent development of complications among individuals with chronic medical disorders such as diabetes and congestive heart failure (Jerant, Azari, Martinez, & Nesbitt, 2003; Piette, Weinberger, Kraemer, & McPhee, 2001). Telephone support has been shown to improve outcomes for depressed individuals treated in primary care settings (Dietrich et al., 2004). Telephone monitoring and counseling has been used to help maintain abstinence following discharge from intensive addiction treatment (Hilton et al., 2003; McKay et al., 2004). Among clients with mental illness, one-time telephone prompts have been used to increase initial treatment attendance (MacDonald, Brown, & Ellis, 2000). However no research has assessed the feasibility of using ongoing telephone support to maintain chronic PTSD patients' engagement in outpatient treatment.

This pilot study addressed three questions: (1) Can we maintain telephone contact with PTSD patients, some of whom are transient and do not have a permanent residence, after they discharge from residential care? (2) Is telephone monitoring and support acceptable to these clients? (3) Do clients who receive telephone support complete their first outpatient mental health appointment within fewer days of discharge than do clients receiving standard care?

METHODS

Design and Subjects

This study used a quasi-experimental cohort design. All participants were treated in two VA residential treatment programs in the western United States: a men's program for combat veterans (N = 88) and a women's program for veterans who experienced various types of traumas (N = 17). Average length of stay was 64.4 days (SD = 29.3). Participants' mean age was 51.3 years (SD = 7.1). Most subjects were married (43%) or divorced (43%), with 8% never married, 3% separated, and 2% widowed. The sample was 71% Caucasian, 10% African American, 10% Hispanic American/Latino, 5% Native American, and 5% mixed ethnicity. All but one subject had one or more comorbid psychiatric disorders in addition to PTSD, most commonly depression (79%), alcohol use disorders (66%), drug use disorders (51%), or other anxiety disorders (23%).

Clients in the telephone support cohort were 21 men and 6 women who discharged consecutively between August 20, 2002 and October 16, 2002, and gave written consent to participate in this research study. Results from this cohort were compared with de-identified archival data from other clients who had previously consented to have their data used for research. Comparison cohort 1 (31 men and 5 women) discharged in the two months immediately prior to the intervention cohort. Comparison cohort 2 (35 men and 6 women), which was included to control for possible seasonal effects, discharged approximately 1 year before the telephone support cohort. Study procedures were approved by an IRB panel.

Intervention

All clients were expected to continue in outpatient counseling and/or medication management after residential treatment, and had an outpatient appointment scheduled to occur within 30 days of discharge. Clients in the comparison cohorts received only the standard referral to their outpatient counselor and/or psychiatrist. Clients in the telephone support cohort received outpatient referrals plus biweekly telephone monitoring and support during their first 4 months after discharge.

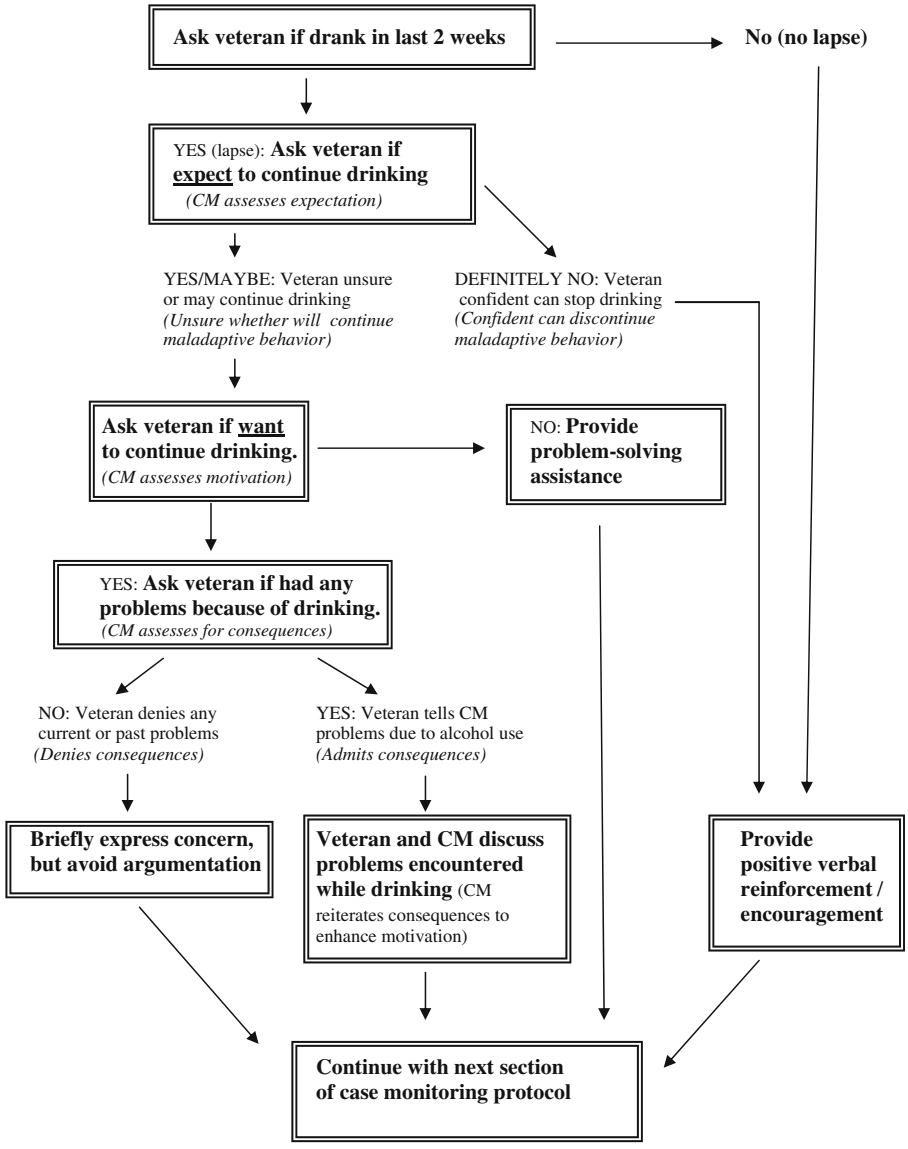
Telephone monitors were clinical psychology graduate students with 1–2 years of practicum experience. Monitors were trained to follow a scripted protocol, which assessed clients' status and identified appropriate psychosocial interventions (e.g., praise, encouragement, problem-solving, etc.). Monitors received daily supervision from a clinical psychologist (CR), plus immediate supervision if crises or problems emerged.

If telephone support recipients were unavailable on the first call attempt, the telephone monitor left a message and toll-free call-back number, and made two additional contact attempts on different days of the week at different times of day. After three unsuccessful call attempts, participants were not re-contacted until their next scheduled call. If the given phone number was no longer in service or the participant was no longer at that number, we obtained the clients' new telephone number from a family member or friend whom the participant had provided as a contact.

When monitors reached the client, they followed a scripted protocol to briefly assess the clients' outpatient treatment attendance, medication compliance, substance use, social isolation, homicidality, and suicidality. Monitors' choice of brief counseling interventions was based on a tailoring algorithm (see Figure 1) although the interventions themselves were not scripted. Clients who were maintained positive behaviors were verbally reinforced. Clients who had a lapse would get interventions tailored to their status. For example, if a client reported threatening

FIGURE 1

Tailoring Algorithm in Intervention Protocol (example: alcohol abuse)



someone during an argument, the monitor asked whether this caused the client any problems (negative consequences) and whether the client was satisfied with how he had handled his anger. If the client said he was satisfied, the monitor briefly reiterated the negative consequences mentioned by the client and moved on. If the client felt he handled the argument badly, the monitor asked the client to generate some alternative things he could have done instead. If necessary, the monitor suggested specific anger management techniques that the client had learned in residential treatment. If the client thought he could use such alternate behaviors in the future, he was verbally reinforced. If the client thought he could not use these alternate behaviors, barriers were explored and new alternatives were identified. If clients were at risk of harming themselves or others, monitors immediately alerted their supervisor and the clients' outpatient provider, and facilitated the client getting an immediate appointment.

Measures

Baseline characteristics of the three study cohorts were compared using the short form of the Mississippi PTSD scale (Keane, Caddell, & Taylor, 1988), the alcohol and drug use composites of the self-report version of the Addiction Severity Index (McLellan et al., 1992), and a four-item index of violent behavior used in ongoing evaluations VA residential treatment programs (Fontana et al., 2003). These self-report measures were also used to assess functioning 4 months after discharge among clients in the telephone support cohort.

Feasibility indicators (percent of contacts completed and median call length) were drawn from study records. Client satisfaction was assessed by averaging a four-item satisfaction index used in VA program evaluation surveys mailed to all clients 4 months after discharge (Fontana et al., 2003). Post-discharge survey response rates were similar in the telephone support (78.6%) and control cohorts (75.6%). Time from discharge to veterans' first completed VA mental health visit was assessed from VA administrative data.

RESULTS

Chi square and ANOVA analyses showed no significant differences in age, gender, marital status, ethnicity, and self-reported violent behavior, substance use, and PTSD symptoms at intake among the three cohorts. However, average length of stay was significantly longer (t (103) = 2.3, $p < .05$) in the telephone support cohort (76 days) than in the two comparison cohorts (60 days).

Feasibility

Of the 30 veterans eligible for telephone support, 93% agreed to participate. One died prior to completion of the study. Monitors established contact with 95% of the remaining 27 clients, completing an average of 6 of the 8 planned calls. Telephone calls lasted from 4 to 63 minutes

(median 18 minutes) depending on the number of problems clients were experiencing.

Acceptability

Planned contrasts showed that overall satisfaction with care was higher in the telephone support cohort than in the combined controls (d = .40, t (68) = 1.8, one tailed $p < .05$), but did not differ between the two control cohorts (d = .04, t (48) = 0.2, ns). Among telephone support recipients who answered the satisfaction survey, 17 out of 20 (85%) said they wished that the telephone calls could continue after the study was over.

Treatment Entry

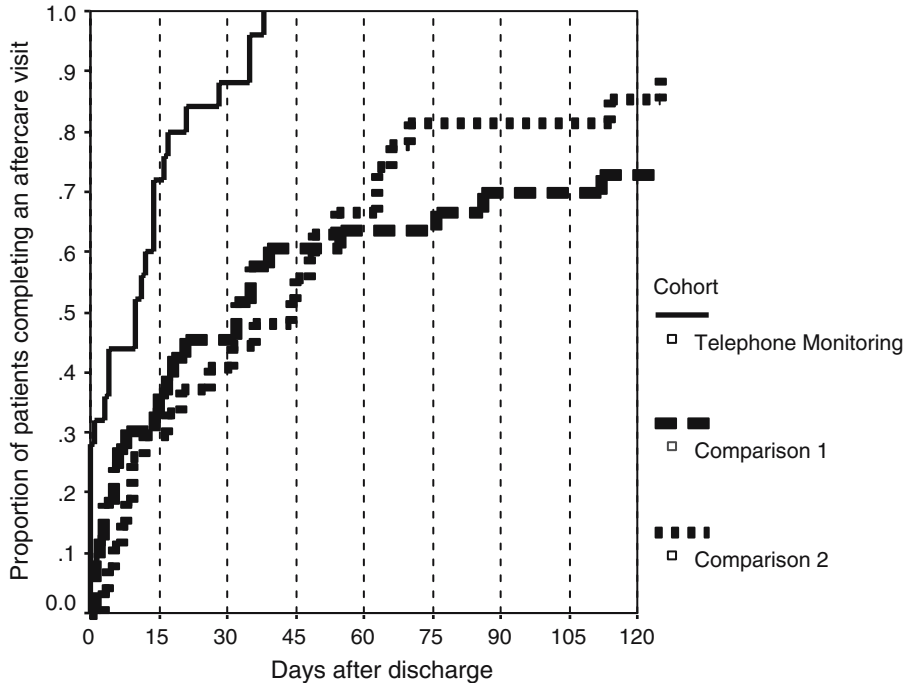
Fourteen participants (2 from the intervention cohort, 12 from control cohorts) were excluded from time to treatment entry analyses because their discharge plans indicated that they were to receive all their aftercare outside the VA medical center system. Twice as many clients in the telephone support cohort (88%) as in the comparison cohorts (46%) completed an outpatient appointment within 30 days of discharge. Kaplan–Meier survival curves (see Figure 2) show that time to treatment entry was significantly shorter in the telephone support cohort (median = 10 days) than in the combined comparison cohorts (median = 32 days; log odds rank (1 df) = 24.7, $p < .001$). Time to treatment entry did not differ between the two comparison cohorts (log odds rank (1 df) = 1.5, ns).

Functioning Outcomes within the Telephone Support Cohort

To assess whether negative side effects may have reduced some clients' willingness to continue with telephone monitoring, we examined (post-hoc) associations between clients' level of participation and their functioning at follow-up, controlling for clients' functioning at intake. No intake characteristics predicted clients' participation. Clients who completed more telephone contacts reported fewer symptoms (semi-partial r (n = 18) = −.41, $p < .10$) and less violent behavior at follow-up (semi-partial r (n = 18) = −.44, $p < .5$). The three clients who did *not* want to continue telephone contacts after the study was over reported more alcohol use (ANCOVA F (1, 16 df) = 3.6, $p < .10$) and more violent behavior (ANCOVA F (1, 16 df) = 6.3, $p < .05$) than did other telephone support recipients.

FIGURE 2

Time to First Outpatient Visit, by Cohort



DISCUSSION

Inexpensive monitoring and support interventions used to improve treatment adherence and lessen rehospitalization among clients with medical and addictive disorders could have potential value in other mentally ill populations such as individuals with chronic PTSD. Results of this pilot study indicate that telephone monitoring and support was feasible and acceptable to most PTSD treatment clients. Telephone support also appeared to increase client satisfaction and speed entry into aftercare, although possible confounds cannot be ruled out in this quasi-experimental design. Within the telephone support cohort, clients who completed more telephone contacts and wanted calls to continue tended to have better outcomes However, it is unclear whether a larger dose of telephone contact contributed to better functioning, whether some clients became more avoidant of monitoring if they had

relapsed, or whether a few clients decided not to continue because telephone contact increased their distress.

This small study lacked sufficient length of follow-up and power to adequately assess the impact of telephone support on clients' continuing attendance in treatment, rehospitalization rates, or long-term clinical outcomes. Additional research is needed to assess whether telephone monitoring and support improves the functioning of clients recovering from chronic PTSD.

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